COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF POINT AND NON-POINT SOURCE MANAGEMENT

pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

AUTHORIZATION TO DISCHARGE UNDER THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM DISCHARGE REQUIREMENTS FOR INDUSTRIAL WASTEWATER FACILITIES

NPDES PERMIT NO: PA0008281

In compliance with the provisions of the Clean Water Act, 33 U.S.C. Section 1251 *et seq.* ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 *et seq.*,

PPL Brunner Island LLC
2 N. 9th Street
Allentown, PA 18101-1139

is authorized to discharge from a facility known as **PPL Brunner Island Power Station**, located in **East Manchester Township, York County**, to **Susquehanna River, Conewago Creek and Hartman Run** in Watershed(s) **7-F, 7-G and 7-H** in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts A, B and C hereof.

THIS PERMIT SHALL BECOME EFFECTIVE ON _____

THIS PERMIT SHALL EXPIRE AT MIDNIGHT ON _____

The authority granted by this permit is subject to the following further qualifications:

1. If there is a conflict between the application, its supporting documents and/or amendments and the terms and conditions of this permit, the terms and conditions shall apply.

2. Failure to comply with the terms, conditions or effluent limitations of this permit is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. (40 CFR 122.41(a))

3. A complete application for renewal of this permit, or notice of intent to cease discharging by the expiration date, must be submitted to DEP at least 180 days prior to the above expiration date (unless permission has been granted by DEP for submission at a later date), using the appropriate NPDES permit application form. (40 CFR 122.41(b), 122.21(d)(2))

   In the event that a timely and complete application for renewal has been submitted and DEP is unable, through no fault of the permittee, to reissue the permit before the above expiration date, the terms and conditions of this permit, including submission of the Discharge Monitoring Reports (DMRs), will be automatically continued and will remain fully effective and enforceable against the discharger until DEP takes final action on the pending permit application. (25 Pa. Code 92a.7(b), (c))

4. This NPDES permit does not constitute authorization to construct or make modifications to wastewater treatment facilities necessary to meet the terms and conditions of this permit.

DATE PERMIT ISSUED _____ **ISSUED BY** _____

Maria D. Bebenek, P.E.
Clean Water Program Manager
Southcentral Regional Office

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Outfall 001 , **Latitude** 40° 5' 29" , **Longitude** 76° 41' 15" , **River Mile Index** 54.27 , **Stream Code** 06685

Receiving Waters: Susquehanna River

Type of Effluent: Once-through non-contact cooling water

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter [10],[11]	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) [1]		Concentrations (mg/L)			Minimum [2] Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	Continuous	Calculation
pH (S.U.) [3]	XXX	XXX	6.0 Min	XXX	9.0	1/day	Grab
Total Residual Oxidants [4]	XXX	XXX	0.2	XXX	0.2	1/day	Grab
Temperature (°F) [5] Intake	XXX	XXX	Report	Report	XXX	Continuous	I-S
Temperature (°F) [6]	XXX	XXX	Report	Report	110	Continuous	I-S
Hourly Temperature Change (°F) [7] Instream Monitoring	XXX	XXX	XXX	XXX	2.0	Continuous	I-S
Heat Rejection Rate (MBTUs/day) [8] Dec 1 - Feb 28	XXX	167,040	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) [9] Mar 1 - Apr 30, Nov 1-30	XXX	91,870	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) [9] May 1-31, Oct 1-31	XXX	83,520	XXX	XXX	XXX	1/day	Calculation
Heat Rejection Rate (MBTUs/day) [9] Jun 1 - Sep 30	XXX	75,170	XXX	XXX	XXX	1/day	Calculation
Trihalomethanes [12]	XXX	XXX	Report	Report	XXX	XXX	1/week

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): At end of condenser discharge channel prior to confluence with Susquehanna River. Measurements to determine compliance with the Hourly Instream Temperature Change limitation shall be taken at the point of compliance, 5,000 feet downstream of the discharge channel confluence with the River.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. B. For Outfall 002 , **Latitude** 40° 5' 59" , **Longitude** 76° 41' 42" , **River Mile Index** 55.0 , **Stream Code** 06685

Receiving Waters: Susquehanna River

Type of Effluent: Effluent from Incidental Waste Treatment Basin (coal pile runoff and low volume wastes)

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	Continuous	Measured
pH (S.U.) (13)	XXX	XXX	6.0 Min	XXX	9.0	1/day	Grab
Oil and Grease	XXX	XXX	15	20	30	2/month	Grab
Total Suspended Solids	XXX	XXX	30	50	50	2/month	Grab
Total Aluminum	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Arsenic	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Boron	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Cadmium	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Chromium	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Copper	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Iron	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Lead	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Manganese	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Outfall 002, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Mercury	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Molybdenum	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Nickel	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Selenium	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Zinc	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 002.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. C. For Outfall 003 , **Latitude** 40° 5’ 58” , **Longitude** 76° 41’ 40” , **River Mile Index** 54.76 , **Stream Code** 06685

Receiving Waters: Susquehanna River

Type of Effluent: Sewage treatment plant effluent

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	9.0	1/day	Grab
Dissolved Oxygen	XXX	XXX	5.0	XXX	XXX	1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	1.0	1/day	Grab
CBOD5	XXX	XXX	XXX	25	50	2/month	8-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	30	60	2/month	8-Hr Composite
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200	1,000	2/month	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2,000	10,000	2/month	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	Report	XXX	1/month	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	2.0	XXX	2/month	8-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 003.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. D. For Outfall 004 , **Latitude** 40° 4’ 37” , **Longitude** 76° 40’ 40” , **River Mile Index** 53.17 , **Stream Code** 06685

Receiving Waters: Susquehanna River

Type of Effluent: Effluent from Ash Basin No. 6 (bottom ash transport water, coal pile runoff, low volume wastes)

1. The permittee is authorized to discharge during the period from Permit Effective Date through Termination of Discharge.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	1/day	Measured
pH (S.U.) (13)	XXX	XXX	6.0 Min	XXX	9.0	1/day	Grab
Total Suspended Solids	XXX	XXX	30	50	50	1/week	24-Hr Composite
Oil and Grease	XXX	XXX	15	20	30	2/month	Grab
Total Aluminum	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Arsenic	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Boron	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Cadmium	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Chromium	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Copper	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Iron	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Lead	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Manganese	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Outfall 004, Continued (from Permit Effective Date through Termination of Discharge)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Mercury	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Molybdenum	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Nickel	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Selenium	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
Total Zinc	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 004.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. E. For Outfall 005 , **Latitude** 40° 5’ 34” , **Longitude** 76° 41’ 23” , **River Mile Index** 54.27 , **Stream Code** 06685

Receiving Waters: Susquehanna River (via condenser discharge channel)

Type of Effluent: Industrial waste treatment plant effluent (bottom ash transport water, low volume wastes and landfill leachate)

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Min	XXX	9.0	1/day	Grab
Oil and Grease	688	917	15	20	30	2/month	Grab
Total Suspended Solids	1,376	2,294	30	50	50	2/month	24-hour comp
Total Aluminum	13.3	26.6	0.29	0.58	0.73	1/month	24-hour comp
Total Arsenic	0.275	0.55	0.006	0.012	0.015	1/month	24-hour comp
Total Boron	9.2	18.4	0.2	0.4	0.5	1/month	24-hour comp
Total Cadmium	0.0092	0.0184	0.0002	0.0004	0.0005	1/month	24-hour comp
Total Chromium	0.092	0.184	0.002	0.004	0.005	1/month	24-hour comp
Total Copper	0.183	0.367	0.004	0.008	0.010	1/month	24-hour comp
Total Iron	12.4	24.8	0.27	0.54	0.68	1/month	24-hour comp

Outfall 005, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Lead	0.046	0.092	0.001	0.002	0.0025	1/month	24-hour comp
Total Manganese	XXX	XXX	XXX	Report	XXX	1/month	24-hour comp
Total Mercury	0.00021	0.00042	0.0000046	0.0000092	0.0000115	1/month	24-hour comp
Total Molybdenum	0.46	0.92	0.01	0.02	0.025	1/month	24-hour comp
Total Nickel	0.46	0.92	0.01	0.02	0.025	1/month	24-hour comp
Total Selenium	0.092	0.184	0.002	0.004	0.005	1/month	24-hour comp
Total Zinc	0.69	1.38	0.015	0.030	0.038	1/month	24-hour comp

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 005 prior to discharge to condenser discharge channel.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. F. **For IMP** 501 , **Latitude** 40° 5' 30.6" , **Longitude** 76° 41' 18.9" , **River Mile Index** _____ , **Stream Code** _____

Receiving Waters: N/A (Discharges to Outfalls 002 or 005)

Type of Effluent: Boiler rinse water (chemical metal cleaning wastes)

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	Daily when Discharging	Measured
pH (S.U.)	XXX	XXX	6.0 Min	XXX	9.0	Daily when Discharging	Grab
Total Suspended Solids	XXX	XXX	30	100	XXX	Daily when Discharging	Grab
Oil and Grease	XXX	XXX	15	20	30	Daily when Discharging	Grab
Total Copper	XXX	XXX	1.0	1.0	XXX	Daily when Discharging	Grab
Total Iron	XXX	XXX	1.0	1.0	XXX	Daily when Discharging	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Internal Monitoring Point (IMP) 501, prior to discharge to IWTP or Incidental Waste Treatment Basins.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. G. For Outfall 007 , **Latitude** 40° 5’ 32” , **Longitude** 76° 41’ 23” , **River Mile Index** 54.27 , **Stream Code** 06685

Receiving Waters: Susquehanna River (via condenser discharge channel)

Type of Effluent: Effluent from flue gas desulfurization wastewater treatment plant

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Min	XXX	9.0	1/day	Grab
Oil and Grease	65	86.7	15	20	30	2/month	Grab
Total Suspended Solids	130	434	30	100	100	2/month	24-hour comp
Total Aluminum	1.73	3.46	0.4	0.8	1.0	1/week	24-hour comp
Total Arsenic	0.087	0.173	0.02	0.04	0.05	1/week	24-hour comp
Total Cadmium	0.074	0.148	0.017	0.034	0.043	1/week	24-hour comp
Total Chromium	0.364	0.728	0.084	0.168	0.21	1/week	24-hour comp
Total Copper	0.065	0.13	0.015	0.030	0.038	1/week	24-hour comp
Total Mercury	0.0082	0.0164	0.00189	0.00378	0.00473	1/week	24-hour comp
Total Molybdenum	0.26	0.52	0.06	0.12	0.15	1/week	24-hour comp
Total Nickel	3.4	6.8	0.78	1.56	1.95	1/week	24-hour comp

Outfall 007, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)			Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Selenium	5.2	10.4	1.2	2.4	3.0	1/week	24-hour comp
Total Thallium	0.022	0.044	0.005	0.01	0.013	1/week	24-hour comp
Total Zinc	0.178	0.356	0.041	0.082	0.103	1/week	24-hour comp
Total Dissolved Solids	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Chloride	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Bromide	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Sulfate	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Fluoride	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Total Antimony	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Total Boron	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Total Iron	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Total Lead	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite
Total Manganese	XXX	XXX	Report	Report	XXX	1/month	24-Hr Composite

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfall 007 prior to commingling with stormwater.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. H. For Outfall 007 **, Latitude** 40° 5' 32" **, Longitude** 76° 41' 23" **, River Mile Index** 54.27 **, Stream Code** 06685

Receiving Waters: Susquehanna River (via condenser discharge channel)

Type of Effluent: Effluent from flue gas desulfurization wastewater treatment plant

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements, Footnotes and Supplemental Information).

Parameter [14]	Effluent Limitations					Monitoring Requirements	
	Mass Units (lbs)		Concentrations (mg/L)			Minimum [2] Measurement Frequency	Required Sample Type
	Monthly	Annual	Minimum	Monthly Average	Instant. Maximum		
Ammonia-N	Report	Report	XXX	Report	XXX	2/month	24-Hr Composite
Total Kjeldahl Nitrogen (TKN)	Report	XXX	XXX	Report	XXX	2/month	24-Hr Composite
Nitrate-Nitrite as N	Report	XXX	XXX	Report	XXX	2/month	24-Hr Composite
Total Nitrogen	Report	Report	XXX	Report	XXX	2/month	24-Hr Composite
Total Nitrogen [15] Intake	Report	XXX	XXX	Report	XXX	2/month	24-Hr Composite
Total Phosphorus	Report	Report	XXX	Report	XXX	2/month	24-Hr Composite
Total Phosphorus [15] Intake	Report	XXX	XXX	Report	XXX	2/month	24-Hr Composite
Net Total Nitrogen	Report	0	XXX	XXX	XXX	1/month	Calculation
Net Total Phosphorus	Report	0	XXX	XXX	XXX	1/month	Calculation

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Outfall 007, prior to commingling with stormwater, and make-up water for lime slurry (intake).

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. I. **For Outfall** 006 , **Latitude** 40° 5’ 15” , **Longitude** 76° 41’ 43” , **River Mile Index** , **Stream Code** 06685
For Outfall 013 , **Latitude** 40° 05’ 49” , **Longitude** 76° 41’ 32” , **River Mile Index** , **Stream Code** 06685
For Outfall 014 , **Latitude** 40° 5’ 51” , **Longitude** 76° 41’ 34” , **River Mile Index** , **Stream Code** 06685
For Outfall 015 , **Latitude** 40° 05’ 31” , **Longitude** 76° 41’ 21” , **River Mile Index** , **Stream Code** 06685
For Outfall 026 , **Latitude** 40° 05’ 53” , **Longitude** 76° 42’ 07” , **River Mile Index** , **Stream Code** 08303

Receiving Waters: Conewago Creek and Susquehanna River

Type of Effluent: Stormwater

1. The permittee is authorized to discharge during the period from Permit Effective Date through Permit Expiration Date.

2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum [(2)] Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Oil and Grease	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Aluminum	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Arsenic	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Boron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Cadmium	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Chromium	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Copper	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Lead	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Outfalls 006, 013, 014, 015, and 026, Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Total Manganese	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Mercury	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Molybdenum	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Nickel	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Selenium	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab
Total Zinc	XXX	XXX	XXX	XXX	Report	XXX	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): at Outfalls 006, 013, 014 (prior to discharge to Outfall 013), 015, and 026 (see Part C VII).

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS (Continued)

Additional Requirements

The permittee may not discharge:

1. Floating solids, scum, sheen or substances that result in observed deposits in the receiving water. (25 Pa Code 92a.41(c))

2. Oil and grease in amounts that cause a film or sheen upon or discoloration of the waters of this Commonwealth or adjoining shoreline, or that exceed 15 mg/l as a daily average or 30 mg/l at any time (or lesser amounts if specified in this permit). (25 Pa. Code 92a.47(a)(7) and 95.2(2))

3. Substances in concentration or amounts sufficient to be inimical or harmful to the water uses to be protected or to human, animal, plant or aquatic life. (25 Pa Code 93.6(a))

4. Foam or substances that produce an observed change in the color, taste, odor or turbidity of the receiving water, unless those conditions are otherwise controlled through effluent limitations or other requirements in this permit. (25 Pa Code 92a.41(c))

Footnotes

(1) When sampling to determine compliance with mass effluent limitations, the discharge flow at the time of sampling must be measured and recorded.

(2) This is the minimum number of sampling events required. Permittees are encouraged, and it may be advantageous in demonstrating compliance, to perform more than the minimum number of sampling events. If additional sampling is preformed beyond the minimum number of required sample events, the results shall be recorded on Discharge Monitoring Reports (DMRs) and Supplemental reports.

(3) Daily monitoring of pH shall be conducted during any day in which any chemical is introduced to cooling water in condensers or cooling towers. In the event that effluent pH is outside the range of 6 to 9 S.U., the limitations do not apply if the permittee demonstrates that the pH of the intake water on the same day is also outside the range of 6 to 9 S.U.

(4) Daily monitoring of Total Residual Oxidants (TRO) shall be conducted during any day in which chemicals containing chlorine or bromine are introduced to cooling water in condensers or cooling towers. Samples shall be collected at the end of the discharge channel. For condensers, chlorine or other approved biocides may not be discharged from any single generating unit for more than two hours per day unless the discharger demonstrates to the permitting authority that discharge for more than two hours is required for macroinvertebrate control. Simultaneous multi-unit chlorination/biocide application is permitted.

(5) Plant intake temperature monitoring shall be conducted continuously at the intake structures (at least one measurement every 15 minutes). The results shall be representative of river conditions prior to withdrawal. At least two temperature monitors shall be utilized, and the data obtained from the monitors shall be averaged for each successive 24-hour period for reporting purposes. Report average daily intake temperatures on the Supplemental DMR, and the average monthly and maximum daily average temperatures measured during the month on the DMR. The permittee shall maintain all continuous intake temperature measurements for a period of no less than 5 years, and shall provide DEP with the data in electronic format upon request. The intake temperature monitors shall be capable of achieving a minimum of 0.5°F accuracy at all times, and the monitoring system shall be operated and maintained pursuant to manufacturer specifications. The temperature monitors must be checked against a reference certified by the National Institute of Standards and Technology (NIST) at least annually.

(6) Effluent temperature monitoring shall be conducted continuously in the condenser discharge channel, at least 50 feet upstream of the confluence with the Susquehanna River (at least one measurement every 15 minutes). At least two monitors shall be utilized across the width of the channel at a location downstream of Oufall 001

and the data shall be averaged for each successive 24-hour period for reporting purposes. Report average daily effluent temperatures on the Supplemental DMR, and the average monthly, maximum daily average and instantaneous maximum temperatures recorded during the month on the DMR. The permittee shall maintain all continuous effluent temperature measurements for a period of no less than 5 years, and shall provide DEP with the data in electronic format upon request. The effluent temperature sensors shall be capable of achieving a minimum of 0.5°F accuracy at all times, and the monitoring system shall be operated and maintained pursuant to manufacturer specifications. The temperature monitors must be checked against a reference certified by the National Institute of Standards and Technology (NIST) at least annually.

(7) The permittee shall implement the continuous temperature monitoring work plan, approved by DEP on May 15, 2007. The permittee may use average data measured by the temperature monitors at the point of compliance (5,000 feet downstream of the discharge channel) for determining compliance with the maximum hourly temperature change limitation. The permittee shall submit monitoring data in electronic format to DEP within 30 days of receipt of written request from DEP.

(8) To comply with the Heat Rejection Rate limitations and monitoring requirements for Outfall 001, the permittee shall monitor the following parameters:

Parameter	Units	Monitoring Locations
Discharge, Qd	MGD	Inlet to condensers (Average daily flow from all units and cooling structures)
Plant Intake Temperature, T1	°F	Susquehanna River at intake (Average daily temperature as specified in Footnote 4)
Effluent Temperature, Td	°F	End of discharge channel (Average daily temperature as specified in Footnote 5)

For reporting purposes, the permittee shall perform the following calculations:

Qd x 8.34 (Td – T1) = actual Heat Rejection Rate in million BTUs/day (MBTUs/day).

Report the daily Heat Rejection Rate on Supplemental DMRs, and the average monthly and maximum daily Heat Rejection Rates recorded during the month on the DMR.

(9) Calculate Heat Rejection Rate as specified in Footnote 8. During the operating season (March 1 – November 30), 100% of condenser discharge flows shall be treated by the cooling structures unless all power generating units are off-line. The permittee may reject more heat than the applicable maximum daily Heat Rejection Rate limitations if the permittee can document the following:

- Maximum Daily Heat Rejection Rate limitations were exceeded although 1) the cooling structures received 100% of condenser discharge flows, and 2) dual-speed fans were run at full-speed (unless the permittee can document conditions specified in paragraph c);
- The average daily wet-bulb air temperature exceeded the design wet-bulb temperature (in relation to the average daily cooling structure intake temperature), as approved in a Water Quality Management Permit; or
- The permittee followed an approved Operation and Maintenance Plan with respect to actions to prevent icing or address equipment malfunctions, which affected the efficiency of the cooling structures; or
- The cooling structures were bypassed for reasons specified in Part B I F.2, in which the notification requirements listed in Part A III.C.4 and Part B I.F.4 apply.

The permittee shall submit, as an attachment to the DMR, a detailed justification for each day in which the Heat Rejection Rate exceeded applicable limitations to DEP for review and approval. The justification shall include wet-bulb air temperatures, effluent temperatures, plant intake temperatures and cooling structure intake temperatures for the entire day, and an analysis documenting that atmospheric conditions were such that the Heat Rejection Rate limitations could not be achieved. The plant manager or authorized representative responsible for cooling structure operation shall sign the justification.

(10) The ambient air temperature monitoring station installed on-site shall be maintained and remain capable of continuous measurement of wet-bulb air temperatures (at least one every 15 minutes). Report average daily wet bulb air temperatures on the Supplemental DMR or other attachment to the DMR, using available data. The permittee shall maintain all continuous air temperature measurements for a period of 5 years, and shall provide DEP with any data in electronic format upon request. The temperature monitors shall be calibrated as recommended by the manufacturer. Calibration records shall be maintained on-site for a period of no less than 5 years, and shall be made available to DEP upon request.

(11) Cooling structure intake temperature monitoring shall be conducted continuously (at least one measurement every 15 minutes). At least two temperature monitors shall be used and the data from the monitors shall be averaged for each successive 24-hour period for reporting purposes. Report average daily intake temperatures on the Supplemental DMR or other attachment to the DMR. The permittee shall maintain all continuous intake temperature measurements for a period of no less than 5 years, and shall provide DEP with the data in electronic format upon request. The intake temperature monitors shall be capable of achieving a minimum of 0.5°F accuracy at all times, and the monitoring system shall be operated and maintained pursuant to manufacturer specifications. The temperature monitors must be checked against a reference certified by the National Institute of Standards and Technology (NIST) at least annually.

(12) Weekly monitoring for Trihalomethanes (THMs) shall be conducted during any week in which chlorine or bromine containing chemicals are introduced to condensers or cooling structures. Samples shall be collected at the end of the discharge channel.

(13) If the effluent pH at Outfalls 002 and 004 exceeds 9.0 S.U. due to biological respiration of algal growth in the industrial waste treatment basins, the effluent pH at Outfalls 002 and 004 shall not exceed 9.5 S.U. at any time during the periods of biological respiration by algal growth.

(14) See Part C I for Chesapeake Bay requirements for Outfall 007.

(15) In accordance with Part C I.C.4, the permittee is authorized to report the intake loads of Total Nitrogen and Total Phosphorus as offsets. DMR Supplemental Forms shall be used to document the offsets claimed for each month. These offsets as well as nutrient credits may be used to comply with the Annual Net Mass Load limitations for Total Nitrogen and Total Phosphorus specified in Part A I.I. The average monthly intake concentrations and loads for Total Nitrogen and Total Phosphorus must be reported on monthly DMRs. The intake concentrations shall be determined through analysis of lime slurry make-up water, and intake loads shall be calculated by multiplying the average daily influent flow to the FGD wastewater plant by the intake concentrations (measured on the same day) and a conversion factor of 8.34.

Supplemental Information

The effluent limitations for Outfalls 001, 002, 003, 004, 005, and 007 were determined using effluent discharge rates of 795 MGD, 2.0 MGD, 0.032 MGD, 4.8 MGD, 5.5 MGD, and 0.52 MGD, respectively.

II. DEFINITIONS

At Outfall (XXX) means a sampling location in outfall line XXX below the last point at which wastes are added to outfall line (XXX), or where otherwise specified.

Average refers to the use of an arithmetic mean, unless otherwise specified in this permit. (40 CFR 122.41(l)(4)(iii))

Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures and other management practices to prevent or reduce the pollution to surface waters of the Commonwealth. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (25 Pa. Code 92a.2)

Bypass means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR 122.41(m)(1)(i))

Calendar Week is defined as the seven consecutive days from Sunday through Saturday, unless the permittee has been given permission by DEP to provide weekly data as Monday through Friday based on showing excellent performance of the facility and a history of compliance. In cases when the week falls in two separate months, the month with the most days in that week shall be the month for reporting.

Clean Water Act means the Federal Water Pollution Control Act, as amended. (33 U.S.C.A. §§1251 to 1387).

Chemical Additive means a chemical product (including products of disassociation and degradation, collectively "products") introduced into a waste stream that is used for cleaning, disinfecting, or maintenance and which may be detected in effluent discharged to waters of the Commonwealth. The term generally excludes chemicals used for neutralization of waste streams, the production of goods, and treatment of wastewater, with the exception of wastewater treatment chemicals containing polyacrylamides.

Composite Sample (for all except GC/MS volatile organic analysis) means a combination of individual samples (at least eight for a 24-hour period or four for an 8-hour period) of at least 100 milliliters (mL) each obtained at spaced time intervals during the compositing period. The composite must be flow-proportional; either the volume of each individual sample is proportional to discharge flow rates, or the sampling interval is proportional to the flow rates over the time period used to produce the composite. (EPA Form 2C)

Composite Sample (for GC/MS volatile organic analysis) consists of at least four aliquots or grab samples collected during the sampling event (not necessarily flow proportioned). The samples must be combined in the laboratory immediately before analysis and then one analysis is performed. (EPA Form 2C)

Daily Average Temperature means the average of all temperature measurements made, or the mean value plot of the record of a continuous automated temperature recording instrument, either during a calendar day or during the operating day if flows are of a shorter duration.

Daily Discharge means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants with limitations expressed in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (25 Pa. Code 92a.2 and 40 CFR 122.2)

Daily Maximum Discharge Limitation means the highest allowable "daily discharge."

Discharge Monitoring Report (DMR) means the DEP or EPA supplied form(s) for the reporting of self-monitoring results by the permittee. (25 Pa. Code 92a.2 and 40 CFR 122.2)

Estimated Flow means any method of liquid volume measurement based on a technical evaluation of the sources contributing to the discharge including, but not limited to, pump capabilities, water meters and batch discharge volumes.

Geometric Mean means the average of a set of n sample results given by the nth root of their product.

Grab Sample means an individual sample of at least 100 mL collected at a randomly selected time over a period not to exceed 15 minutes. (EPA Form 2C)

Hazardous Substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act. (40 CFR 122.2)

Hauled-In Wastes means any waste that is introduced into a treatment facility through any method other than a direct connection to the wastewater collection system. The term includes wastes transported to and disposed of within the treatment facility or other entry points within the collection system.

Immersion Stabilization (i-s) means a calibrated device is immersed in the wastewater until the reading is stabilized.

Instantaneous Maximum Effluent Limitation means the highest allowable discharge of a concentration or mass of a substance at any one time as measured by a grab sample. (25 Pa. Code 92a.2)

Measured Flow means any method of liquid volume measurement, the accuracy of which has been previously demonstrated in engineering practice, or for which a relationship to absolute volume has been obtained.

Monthly Average Discharge Limitation means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month. (25 Pa. Code 92a.2)

Non-contact Cooling Water means water used to reduce temperature which does not come in direct contact with any raw material, intermediate product, waste product (other than heat), or finished product.

Severe Property Damage means substantial physical damage to property, damage to the treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production. (40 CFR 122.41(m)(1)(ii))

Stormwater means the runoff from precipitation, snow melt runoff, and surface runoff and drainage. (25 Pa. Code 92a.2)

Stormwater Associated With Industrial Activity means the discharge from any conveyance that is used for collecting and conveying stormwater and that is directly related to manufacturing, processing, or raw materials storage areas at an industrial plant, and as defined at 40 CFR 122.26(b)(14) (i) - (ix) & (xi) and 25 Pa. Code 92a.2.

Total Dissolved Solids means the total dissolved (filterable) solids as determined by use of the method specified in 40 CFR Part 136.

Toxic Pollutant means those pollutants, or combinations of pollutants, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains may, on the basis of information available to DEP cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions, including malfunctions in reproduction, or physical deformations in these organisms or their offspring. (25 Pa. Code 92a.2)

III. SELF-MONITORING, REPORTING AND RECORDKEEPING

A. Representative Sampling

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 CFR 122.41(j)(1)). Representative sampling includes the collection of samples, where possible, during periods of adverse weather, changes in treatment plant performance and changes in treatment plant loading. If possible, effluent samples must be collected where the effluent is well mixed near the center of the discharge conveyance and at the approximate mid-depth point, where the turbulence is at a maximum and the settlement of solids is minimized. (40 CFR 122.48 and 25 Pa. Code § 92a.61)

2. Records Retention (40 CFR 122.41(j)(2))

   Except for records of monitoring information required by this permit related to the permittee's sludge use and disposal activities which shall be retained for a period of at least 5 years, all records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records), copies of all reports required by this permit, and records of all data used to complete the application for this permit shall be retained by the permittee for 3 years from the date of the sample measurement, report or application, unless a longer retention period is required by the permit. The 3-year period shall be extended as requested by DEP or the EPA Regional Administrator.

3. Recording of Results (40 CFR 122.41(j)(3))

   For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

   a. The exact place, date and time of sampling or measurements.
   b. The person(s) who performed the sampling or measurements.
   c. The date(s) the analyses were performed.
   d. The person(s) who performed the analyses.
   e. The analytical techniques or methods used; and the associated detection level.
   f. The results of such analyses.

4. Test Procedures (40 CFR 122.41(j)(4))

   Facilities that test or analyze environmental samples used to demonstrate compliance with this permit shall be in compliance with laboratory accreditation requirements of Act 90 of 2002 (27 Pa. C.S. §§4101-4113) and 25 Pa. Code Chapter 252, relating to environmental laboratory accreditation. Unless otherwise specified in this permit, the test procedures for the analysis of pollutants shall be those approved under 40 CFR Part 136 (or in the case of sludge use or disposal, approved under 40 CFR Part 136, unless otherwise specified in 40 CFR Part 503 or Subpart J of 25 Pa. Code Chapter 271), or alternate test procedures approved pursuant to those parts, unless other test procedures have been specified in this permit.

5. Quality/Assurance/Control

   In an effort to assure accurate self-monitoring analyses results:

   a. The permittee, or its designated laboratory, shall participate in the periodic scheduled quality assurance inspections conducted by DEP and EPA. (40 CFR 122.41(e), 122.41(i)(3))

   b. The permittee, or its designated laboratory, shall develop and implement a program to assure the quality and accurateness of the analyses performed to satisfy the requirements of this permit, in accordance with 40 CFR Part 136. (40 CFR 122.41(j)(4))

B. Reporting of Monitoring Results

1. The permittee shall effectively monitor the operation and efficiency of all wastewater treatment and control facilities, and the quantity and quality of the discharge(s) as specified in this permit. (40 CFR 122.41(e), 122.44(i)(1))

2. Discharge Monitoring Reports (DMRs) must be completed in accordance with DEP's published DMR Instructions (3800-FM-BPNPSM0463). DMRs are based on calendar reporting periods unless Part C of this permit requires otherwise. DMR(s) must be received by the agency(ies) specified in paragraph 3 below in accordance with the following schedule:

   - Monthly DMRs must be received within 28 days following the end of each calendar month.

   - Quarterly DMRs must be received within 28 days following the end of each calendar quarter, i.e., January 28, April 28, July 28, and October 28.

   - Semiannual DMRs must be received within 28 days following the end of each calendar semiannual period, i.e., January 28 and July 28.

   - Annual DMRs must be received by January 28, unless Part C of this permit requires otherwise.

3. The permittee shall complete all Supplemental Reporting forms (Supplemental DMRs) provided by DEP in this permit (or an approved equivalent), and submit the signed, completed forms as an attachment to the DMR(s). If the permittee elects to use DEP's electronic DMR (eDMR) system, one electronic submission may be made for DMRs and Supplemental DMRs. If paper forms are used, the completed forms shall be mailed to:

   Department of Environmental Protection
   Clean Water Program
   909 Elmerton Avenue
   Harrisburg, PA 17110-8200

   NPDES Enforcement Branch (3WP42)
   Office of Permits & Enforcement
   Water Protection Division
   U.S. EPA - Region III
   1650 Arch Street
   Philadelphia, PA 19103-2029

4. If the permittee elects to begin using DEP's eDMR system to submit DMRs required by the permit, the permittee shall, to assure continuity of business operations, continue using the eDMR system to submit all DMRs and Supplemental Reports required by the permit, unless the following steps are completed to discontinue use of eDMR:

   a. The permittee shall submit written notification to the regional office that issued the permit that it intends to discontinue use of eDMR. The notification shall be signed by a principal executive officer or authorized agent of the permittee.

   b. The permittee shall continue using eDMR until the permittee receives written notification from DEP's Central Office that the facility has been removed from the eDMR system, and electronic report submissions are no longer expected.

5. The completed DMR Form shall be signed and certified by either of the following applicable persons, as defined in 25 Pa. Code 92a.22:

   - For a corporation - by a principal executive officer of at least the level of vice president, or an authorized representative, if the representative is responsible for the overall operation of the facility from which the discharge described in the NPDES form originates.

- For a partnership or sole proprietorship - by a general partner or the proprietor, respectively.
- For a municipality, state, federal or other public agency - by a principal executive officer or ranking elected official.

If signed by a person other than the above, written notification of delegation of DMR signatory authority must be submitted to DEP in advance of or along with the relevant DMR form. (40 CFR 122.22(b))

6. If the permittee monitors any pollutant at monitoring points as designated by this permit, using analytical methods described in Part A III.A.4. herein, more frequently than the permit requires, the results of this monitoring shall be incorporated, as appropriate, into the calculations used to report self-monitoring data on the DMR. (40 CFR 122.41(l)(4)(ii))

C. Reporting Requirements

1. Planned Changes to Physical Facilities – The permittee shall give notice to DEP as soon as possible but no later than 30 days prior to planned physical alterations or additions to the permitted facility. A permit under 25 Pa. Code Chapter 91 may be required for these situations prior to implementing the planned changes. A permit application, or other written submission to DEP, can be used to satisfy the notification requirements of this section.

   Notice is required when:

   a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR §122.29(b). (40 CFR 122.41(l)(1)(i))

   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are not subject to effluent limitations in this permit. (40 CFR 122.41(l)(1)(ii))

   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. (40 CFR 122.41(l)(1)(iii))

   d. The planned change may result in noncompliance with permit requirements. (40 CFR 122.41(l)(2))

2. Planned Changes to Waste Stream – Under the authority of 25 Pa. Code 92a.24(a), the permittee shall provide notice to DEP as soon as possible but no later than 45 days prior to any changes in the volume or pollutant concentration of its influent waste stream as a result of indirect discharges or hauled-in wastes, as specified in paragraphs 2.a. and 2.b., below. Notice shall be provided on the "Planned Changes to Waste Stream" Supplemental Report (3800-FM-BPNPSM0482), available on DEP's website. The permittee shall provide information on the quality and quantity of waste introduced into the facility, and any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility. The Report shall be sent via Certified Mail or other means to confirm DEP's receipt of the notification. DEP will determine if the submission of a new application and receipt of a new or amended permit is required.

   a. Introduction of New Pollutants (25 Pa. Code 92a.24(a))

      New pollutants are defined as parameters that meet all of the following criteria:

      (i) Were not detected in the facilities' influent waste stream as reported in the permit application; and

      (ii) Have not been approved to be included in the permittee's influent waste stream by DEP in writing.

The permittee shall provide notification of the introduction of new pollutants in accordance with paragraph 2 above. The permittee may not authorize the introduction of new pollutants until the permittee receives DEP's written approval.

b. Increased Loading of Approved Pollutants (25 Pa. Code 92a.24(a))

Approved pollutants are defined as parameters that meet one or more of the following criteria:

(i) Were detected in the facilities' influent waste stream as reported in the permittee's permit application; or

(ii) Have been approved to be included in the permittee's influent waste stream by DEP in writing; or

(iii) Have an effluent limitation or monitoring requirement in this permit.

The permittee shall provide notification of the introduction of increased influent loading (lbs/day) of approved pollutants in accordance with paragraph 2 above when (1) the cumulative increase in influent loading (lbs/day) exceeds 20% of the maximum loading reported in the permit application, or a loading previously approved by DEP, or (2) may cause an exceedance in the effluent of Effluent Limitation Guidelines (ELGs) or limitations in Part A of this permit, or (3) may cause interference or pass through at the facility, or (4) may cause exceedances of the applicable water quality standards in the receiving stream. Unless specified otherwise in this permit, if DEP does not respond to the notification within 30 days of its receipt, the permittee may proceed with the increase in loading. The acceptance of increased loading of approved pollutants may not result in an exceedance of ELGs or effluent limitations and may not cause exceedances of the applicable water quality standards in the receiving stream.

3. Reporting Requirements for Hauled-In Wastes

a. Receipt of Residual Waste

(i) The permittee shall document the receipt of all hauled-in residual wastes (including but not limited to wastewater from oil and gas wells, food processing waste, and landfill leachate), as defined at 25 Pa. Code § 287.1, that are received for processing at the treatment facility. The permittee shall report hauled-in residual wastes on a monthly basis to DEP on the "Hauled In Residual Wastes" Supplemental Report (3800-FM-BPNPSM0450) as an attachment to the DMR. If no residual wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report. The information used to develop the Report shall be retained by the permittee for five years from the date of receipt and must be made available to DEP or EPA upon request.

(1) The dates that residual wastes were received.

(2) The volume (gallons) of wastes received.

(3) The license plate number of the vehicle transporting the waste to the treatment facility.

(4) The permit number(s) of the well(s) where residual wastes were generated, if applicable.

(5) The name and address of the generator of the residual wastes.

(6) The type of wastewater.

The transporter of residual waste must maintain these and other records as part of the daily operational record (25 Pa. Code § 299.219). If the transporter is unable to provide this

information or the permittee has not otherwise received the information from the generator, the residual wastes shall not be accepted by the permittee until such time as the permittee receives such information from the transporter or generator.

(ii) The following conditions apply to the characterization of residual wastes received by the permittee:

(1) If the generator is required to complete a chemical analysis of residual wastes in accordance with 25 Pa. Code § 287.51, the permittee must receive and maintain on file a chemical analysis of the residual wastes it receives. The chemical analysis must conform to the Bureau of Waste Management's Form 26R except as noted in paragraph (2), below. Each load of residual waste received must be covered by a chemical analysis if the generator is required to complete it.

(2) For wastewater generated from hydraulic fracturing operations ("frac wastewater") within the first 30 production days of a well site, the chemical analysis may be a general frac wastewater characterization approved by DEP. Thereafter, the chemical analysis must be waste-specific and be reported on the Form 26R.

b. Receipt of Municipal Waste

(i) The permittee shall document the receipt of all hauled-in municipal wastes (including but not limited to septage and liquid sewage sludge), as defined at 25 Pa. Code § 271.1, that are received for processing at the treatment facility. The permittee shall report hauled-in municipal wastes on a monthly basis to DEP on the "Hauled In Municipal Wastes" Supplemental Report (3800-FM-BPNPSM0437) as an attachment to the DMR. If no municipal wastes were received during a month, submission of the Supplemental Report is not required.

The following information is required by the Supplemental Report:

(1) The dates that municipal wastes were received.

(2) The volume (gallons) of wastes received.

(3) The BOD_5 concentration (mg/l) and load (lbs) for the wastes received.

(4) The location(s) where wastes were disposed of within the treatment facility.

(ii) Sampling and analysis of hauled-in municipal wastes must be completed to characterize the organic strength of the wastes, unless composite sampling of influent wastewater is performed at a location downstream of the point of entry for the wastes.

4. Unanticipated Noncompliance or Potential Pollution Reporting

a. Immediate Reporting - The permittee shall immediately report any incident causing or threatening pollution in accordance with the requirements of 25 Pa. Code Sections 91.33 and 92a.41(b).

(i) If, because of an accident, other activity or incident a toxic substance or another substance which would endanger users downstream from the discharge, or would otherwise result in pollution or create a danger of pollution or would damage property, the permittee shall immediately notify DEP by telephone of the location and nature of the danger. Oral notification to DEP is required as soon as possible, but no later than 4 hours after the permittee becomes aware of the incident causing or threatening pollution.

(ii) If reasonably possible to do so, the permittee shall immediately notify downstream users of the waters of the Commonwealth to which the substance was discharged. Such notice shall include the location and nature of the danger.

(iii) The permittee shall immediately take or cause to be taken steps necessary to prevent injury to property and downstream users of the waters from pollution or a danger of pollution and, in addition, within 15 days from the incident, shall remove the residual substances contained thereon or therein from the ground and from the affected waters of this Commonwealth to the extent required by applicable law.

b. The permittee shall report any noncompliance which may endanger health or the environment in accordance with the requirements of 40 CFR 122.41(l)(6). These requirements include the following obligations:

(i) 24 Hour Reporting - The permittee shall orally report any noncompliance with this permit which may endanger health or the environment within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which must be reported within 24 hours under this paragraph:

(1) Any unanticipated bypass which exceeds any effluent limitation in the permit;

(2) Any upset which exceeds any effluent limitation in the permit; and

(3) Violation of the maximum daily discharge limitation for any of the pollutants listed in the permit as being subject to the 24-hour reporting requirement. (40 CFR 122.44(g))

(ii) Written Report - A written submission shall also be provided within 5 days of the time the permittee becomes aware of any noncompliance which may endanger health or the environment. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(iii) Waiver of Written Report - DEP may waive the written report on a case-by-case basis if the associated oral report has been received within 24 hours from the time the permittee becomes aware of the circumstances which may endanger health or the environment. Unless such a waiver is expressly granted by DEP, the permittee shall submit a written report in accordance with this paragraph. (40 CFR 122.41(l)(6)(iii))

5. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under paragraph C.4 of this section or specific requirements of compliance schedules, at the time DMRs are submitted, on the Non-Compliance Reporting Form (3800-FM-BPNPSM0440). The reports shall contain the information listed in paragraph C.4.b.(ii) of this section. (40 CFR 122.41(l)(7))

D. Specific Toxic Pollutant Notification Levels (for Manufacturing, Commercial, Mining, and Silvicultural Direct Dischargers) - The permittee shall notify DEP as soon as it knows or has reason to believe the following: (40 CFR 122.42(a))

1. That any activity has occurred, or will occur, which would result in the discharge of any toxic pollutant which is not limited in this permit, if that discharge on a routine or frequent basis will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(1))

a. One hundred micrograms per liter.

b. Two hundred micrograms per liter for acrolein and acrylonitrile.

c. Five hundred micrograms per liter for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol.

d. One milligram per liter for antimony.

e. Five times the maximum concentration value reported for that pollutant in this permit application.

f. Any other notification level established by DEP.

2. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels": (40 CFR 122.42(a)(2))

a. Five hundred micrograms per liter.

b. One milligram per liter for antimony.

c. Ten times the maximum concentration value reported for that pollutant in the permit application.

d. Any other notification level established by DEP.

PART B

I. MANAGEMENT REQUIREMENTS

A. Compliance Schedules (25 Pa. Code 92a.51 and 40 CFR 122.47(a))

1. The permittee shall achieve compliance with the terms and conditions of this permit within the time frames specified in this permit.

2. The permittee shall submit reports of compliance or noncompliance, or progress reports as applicable, for any interim and final requirements contained in this permit. Such reports shall be submitted no later than 14 days following the applicable schedule date or compliance deadline. (40 CFR 122.47(a)(4))

B. Permit Modification, Termination, or Revocation and Reissuance

1. This permit may be modified, terminated, or revoked and reissued during its term in accordance with Title 25 Pa. Code 92a.72 and 40 CFR 122.41(f).

2. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition. (40 CFR 122.41(f))

3. In the absence of DEP action to modify or revoke and reissue this permit, the permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time specified in the regulations that establish those standards or prohibitions. (40 CFR 122.41(a)(1))

C. Duty to Provide Information

1. The permittee shall furnish to DEP, within a reasonable time, any information which DEP may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. (40 CFR 122.41(h))

2. The permittee shall furnish to DEP, upon request, copies of records required to be kept by this permit. (40 CFR 122.41(h))

3. Other Information - Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to DEP, it shall promptly submit the correct and complete facts or information. (40 CFR 122.41(l)(8))

D. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes, but is not limited to, adequate laboratory controls including appropriate quality assurance procedures. This provision also includes the operation of backup or auxiliary facilities or similar systems that are installed by the permittee, only when necessary to achieve compliance with the terms and conditions of this permit. (40 CFR 122.41(e))

E. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or prevent any discharge, sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR 122.41(d))

F. Bypassing

1. Bypassing Not Exceeding Permit Limitations - The permittee may allow a bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions in paragraphs two, three and four of this section. (40 CFR 122.41(m)(2))

2. Other Bypassing - In all other situations, bypassing is prohibited and DEP may take enforcement action against the permittee for bypass unless:

   a. A bypass is unavoidable to prevent loss of life, personal injury or "severe property damage." (40 CFR 122.41(m)(4)(i)(A))

   b. There are no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance. (40 CFR 122.41(m)(4)(i)(B))

   c. The permittee submitted the necessary notice required in F.4.a. and b. below. (40 CFR 122.41(m)(4)(i)(C))

3. DEP may approve an anticipated bypass, after considering its adverse effects, if DEP determines that it will meet the conditions listed in F.2. above. (40 CFR 122.41(m)(4)(ii))

4. Notice

   a. Anticipated Bypass – If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least 10 days before the bypass. (40 CFR 122.41(m)(3)(i))

   b. Unanticipated Bypass – The permittee shall submit oral notice of any other unanticipated bypass within 24 hours, regardless of whether the bypass may endanger health or the environment or whether the bypass exceeds effluent limitations. The notice shall be in accordance with Part A III.C.4.b.

II. PENALTIES AND LIABILITY

A. Violations of Permit Conditions

Any person violating Sections 301, 302, 306, 307, 308, 318 or 405 of the Clean Water Act or any permit condition or limitation implementing such sections in a permit issued under Section 402 of the Act is subject to civil, administrative and/or criminal penalties as set forth in 40 CFR §122.4l(a)(2).

Any person or municipality, who violates any provision of this permit; any rule, regulation or order of DEP; or any condition or limitation of any permit issued pursuant to the Clean Streams Law, is subject to criminal and/or civil penalties as set forth in Sections 602, 603 and 605 of the Clean Streams Law.

B. Falsifying Information

Any person who does any of the following:

- Falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, or

- Knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit (including monitoring reports or reports of compliance or noncompliance)

Shall, upon conviction, be punished by a fine and/or imprisonment as set forth in *18 Pa.C.S.A § 4904* and 40 CFR §122.41(j)(5) and (k)(2).

C. Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance pursuant to Section 309 of the Clean Water Act or Sections 602, 603 or 605 of the Clean Streams Law.

Nothing in this permit shall be construed to preclude the institution of any legal action or to relieve the permittee from any responsibilities, liabilities or penalties to which the permittee is or may be subject to under the Clean Water Act and the Clean Streams Law.

D. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 CFR 122.41(c))

III. OTHER RESPONSIBILITIES

A. Right of Entry

Pursuant to Sections 5(b) and 305 of Pennsylvania's Clean Streams Law, and Title 25 Pa. Code Chapter 92a and 40 CFR §122.41(i), the permittee shall allow authorized representatives of DEP and EPA, upon the presentation of credentials and other documents as may be required by law:

1. To enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; (40 CFR 122.41(i)(1))

2. To have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; (40 CFR 122.41(i)(2))

3. To inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices or operations regulated or required under this permit; and (40 CFR 122.41(i)(3))

4. To sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act or the Clean Streams Law, any substances or parameters at any location. (40 CFR 122.41(i)(4))

B. Transfer of Permits

1. Transfers by modification. Except as provided in paragraph 2 of this section, a permit may be transferred by the permittee to a new owner or operator only if this permit has been modified or revoked and reissued, or a minor modification made to identify the new permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (40 CFR 122.61(a))

2. Automatic transfers. As an alternative to transfers under paragraph 1 of this section, any NPDES permit may be automatically transferred to a new permittee if:

   a. The current permittee notifies DEP at least 30 days in advance of the proposed transfer date in paragraph 2.b. of this section; (40 CFR 122.61(b)(1))

   b. The notice includes the appropriate DEP transfer form signed by the existing and new permittees containing a specific date for transfer of permit responsibility, coverage and liability between them; (40 CFR 122.61(b)(2))

c. DEP does not notify the existing permittee and the proposed new permittee of its intent to modify or revoke and reissue this permit, the transfer is effective on the date specified in the agreement mentioned in paragraph 2.b. of this section; and (40 CFR 122.61(b)(3))

d. The new permittee is in compliance with existing DEP issued permits, regulations, orders and schedules of compliance, or has demonstrated that any noncompliance with the existing permits has been resolved by an appropriate compliance action or by the terms and conditions of the permit (including compliance schedules set forth in the permit), consistent with 25 Pa. Code 92a.51 (relating to schedules of compliance) and other appropriate DEP regulations. (25 Pa. Code 92a.71)

3. In the event DEP does not approve transfer of this permit, the new owner or operator must submit a new permit application.

C. Property Rights

The issuance of this permit does not convey any property rights of any sort, or any exclusive privilege. (40 CFR 122.41(g))

D. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for a new permit. (40 CFR 122.41(b))

E. Other Laws

The issuance of this permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of state or local law or regulations.

IV. ANNUAL FEES

Permittees shall pay an annual fee in accordance with 25 Pa. Code § 92a.62. Annual fee amounts are specified in the following schedule and are due on each anniversary of the effective date of the most recent new or reissued permit. All flows identified in the schedule are annual average design flows. (25 Pa. Code 92a.62)

Minor IW Facility without ELG (Effluent Limitation Guideline)	$500
Minor IW Facility with ELG	$1,500
Major IW Facility < 250 MGD (million gallons per day)	$5,000
Major IW Facility ≥ 250 MGD	$25,000
IW Stormwater Individual Permit	$1,000
CAAP (Concentrated Aquatic Animal Production Facility)	$0

As of the effective date of this permit, the facility covered by the permit is classified in the following fee category: **Major IW Facility ≥ 250 MGD**.

Invoices for annual fees will be mailed to permittees approximately three months prior to the due date. In the event that an invoice is not received, the permittee is nonetheless responsible for payment. Throughout a five year permit term, permittees will pay four annual fees followed by a permit renewal application fee in the last year of permit coverage. Permittees may contact the DEP at 717-787-6744 with questions related to annual fees. The fees identified above are subject to change in accordance with 25 Pa. Code 92a.62(e).

Payment for annual fees shall be remitted to DEP at the address below by the anniversary date. Checks should be made payable to the Commonwealth of Pennsylvania.

PA Department of Environmental Protection

Bureau of Point and Non-Point Source Management
Re: Chapter 92a Annual Fee
P.O. Box 8466
Harrisburg, PA 17105-8466

PART C

I. CHESAPEAKE BAY NUTRIENT REQUIREMENTS – OUTFALL 007

The Annual Net Total Nitrogen (TN) and Annual Net Total Phosphorus (TP) Mass Load effluent limitations (Cap Loads) for Outfall 007 in Part A I.H are required in order to meet the downstream water quality standards of the State of Maryland, as required by 25 Pa. Code Chapter 92a, the federal Clean Water Act and implementing regulations. These effluent limitations do not reflect Credits applied or sold or Offsets applied during this permit cycle.

A. Definitions

Cap Load (lbs): The mass load of a pollutant authorized by an NPDES permit. Cap loads for TN and TP are implemented in NPDES permits by the establishment of Annual Net TN and TP Mass Load limits. The term "Net" is used to recognize that Credits and Offsets may be used to comply with the limits. The Annual Net Mass Load must be less than or equal to the Cap Load to achieve compliance.

Certification: Written approval by DEP of a proposed pollutant reduction activity to generate credits before the credits are verified and registered to be used to comply with NPDES permit effluent limitations.

Compliance Year: The year-long period starting October 1st and ending September 30th. The Compliance Year will be named for the year in which it ends. For example, the period of October 1, 2011 through September 30, 2012 is compliance year 2012.

Credit: The tradable unit of compliance that corresponds with a unit of reduction of a pollutant as recognized by DEP which, when certified, verified and registered, may be used to comply with effluent limits contained in an NPDES permit.

If the Annual Total Mass Load at the end of the Compliance Year is less than the Cap Load in the permit, the number of Credits that may be verified is determined by the following equation:

(Cap Load – Offsets incorporated into Cap Load (if applicable) – Annual Total Mass Load) x Delivery Ratio x 0.9, where 0.9 is the factor used to provide a reserve ratio of 10%.

Delivery Ratio: A ratio that compensates for the natural attenuation of a pollutant as it travels in water before it reaches a defined compliance point. The Delivery Ratios for the facility authorized to discharge under this permit are as follows:

- TN: 0.961
- TP: 0.436

Net Mass Load (lbs):

- Monthly Net Mass Load = Total Monthly Mass Load + (Total Credits sold during the month / Delivery Ratio) – (Total Credits applied during the month / Delivery Ratio) – Offsets applied.
- Annual Net Mass Load = The sum of Monthly Net Mass Loads for one year beginning October 1st and ending September 30th, adjusted for transactions that may occur during the Truing Period.

Offset: The pollutant load reduction measured in pounds (lbs) that is created by an action, activity or technology which, when approved by DEP, may be used to comply with effluent limits contained in an NPDES permit. The offset may only be used by the NPDES permittee that DEP determines is associated with the load reduction achieved by the action, activity or technology. Offsets may be applied to meet compliance with Cap Loads, but may not be treated as Credits, and are not eligible for sale or trading.

Registration: An accounting mechanism used by DEP to track certified and verified credits before they may be used to comply with NPDES permit effluent limitations.

Total Mass Load (lbs):

- Monthly Total Mass Load = The sum of the actual daily discharge loads (lbs/day) divided by the number of samples per month, multiplied by the number of days in the month. The daily discharge load (lbs/day) equals the average daily flow (MGD) on the day of sampling, multiplied by that day's sample concentration (mg/l), multiplied by 8.34.

- Annual Total Mass Load = The sum of the Monthly Total Mass Loads for one year beginning October 1st and ending September 30th.

Total Nitrogen: For concentration and load, Total Nitrogen is the sum of Total Kjeldahl-N (TKN) plus Nitrite-Nitrate as N (NO_2+NO_3-N), where TKN and NO_2+NO_3-N are measured in the same sample.

Truing Period: The time provided at the end of each Compliance Year for a permittee to come into compliance through the application of Credits and Offsets towards the Annual Net Mass Loads. The Truing Period will start on October 1st and end on November 28th of the same calendar year. During this period, compliance for the specified year may be achieved by using registered Credits that were generated during that Compliance Year. For example, Credits that are used to achieve compliance in Compliance Year 2012 must have been generated during Compliance Year 2012. Approved Offsets that have been generated may also be applied during the Truing Period.

Verification: Assurance that the verification plan contained in a certification, permit or other approval issued by DEP under this section has been implemented. Verification is required prior to registration of the credits for use in an NPDES permit to comply with NPDES permit effluent limitations.

B. Use of Credits for Compliance

1. The permittee is authorized to apply TN and TP Credits to achieve compliance with Cap Loads when the Credits are certified, verified and registered in accordance with 25 Pa. Code § 96.8.

2. All Credits must be certified, verified, and registered for the year in which they are used for compliance with this permit. Credits may be applied to achieve compliance until the end of the Truing Period for the Compliance Year.

3. Where non-compliance with a Cap Load is the result of an unmet obligation of a contractual agreement for Credits resulting from failure of the pollutant reduction activity, the failure of the pollutant reduction activity was due to uncontrollable or unforeseeable circumstances, and the permittee provides timely notice to DEP, DEP may consider the factors contained in 25 Pa. Code §§ 96.8(h)(5)(i), (ii), and (iii) to determine the appropriate resolution.

C. Use of Offsets for Compliance

1. Offsets must be approved by DEP in writing before they may be applied for compliance with Cap Loads, in accordance with 25 Pa. Code § 96.8(h)(3).

2. Offsets that are approved under this permit are listed in Part A, Footnotes. These Offsets may be applied each Compliance Year to achieve compliance with the Cap Loads. The application of these Offsets may be reported on a monthly basis or on an annual basis, at the permittee's discretion. Additional Offsets may be approved throughout the permit term.

3. Offsets may be approved for the transfer of load between facilities owned by the same entity if (1) the facility receiving Offsets does not discharge to waters classified as impaired for nutrients and (2) the Delivery Ratios for TN or TP, as applicable, are the same. Such Offsets may only be applied in the Compliance Year in which the transfer occurred, and are not cumulative.

4. Industrial facilities that withdraw water from the same stream or water body to which they discharge, and which have intake monitoring requirements in Part A of this permit, may claim Offsets for background nutrient loads of TN and/or TP if the Cap Loads do not include a deduction for background loads. To utilize the Offsets, the permittee must sample the intake and effluent on the same day, and determine mass loading using the actual flow data for intake and effluent on that day. No Offsets shall be granted for intake nutrients associated with groundwater withdrawals.

D. Modification of Cap Loads

In general, the Cap Loads specified in this permit may be modified only if one or more of the following occur during the permit term:

1. A facility that has an NPDES permit elects to eliminate its discharge and connect to the facility covered under this permit. The lesser of existing annual loads or the facility's Cap Loads will be added to the Cap Loads in this permit.

2. DEP or EPA determines that modified Cap Loads are necessary to achieve water quality standards for the protection of the Chesapeake Bay.

E. Reporting Requirements

1. The facility shall utilize DEP's electronic Discharge Monitoring Report (eDMR) system to submit DMR data and Supplemental DMR forms. This is required to assist DEP with nutrient credit certification and verification, and compliance assessment. Unless the permittee is already using the eDMR system, within 30 days of permit issuance, the permittee shall submit the necessary Registration and Trading Partner Agreement forms to participate in eDMR, and begin using eDMR for submission of DMR data and Supplemental DMR forms when DEP notifies the permittee to begin doing so. The eDMR website is http://www.dep.state.pa.us/edmr. Use of eDMR shall continue unless the requirements of Part A III.B.3 are met.

2. The Nutrient Monitoring supplemental form (3800-FM-BPNPSM0444) shall be used to report daily nutrient sampling results for each monitoring period. This completed form shall be attached to the DMR submission. The spreadsheet version of this form, available on DEP's website, must be used for Credit certification and verification requests submitted to DEP.

3. The Monthly Nitrogen Budget and Monthly Phosphorus Budget supplemental forms (3800-FM-BPNPSM0445 and 3800-FM-BPNPSM0446, respectively) shall be used to calculate Monthly Net Mass Loads. The permittee shall report Credits applied or sold during the monitoring period, including registry number, contract effective date, and DEP certification approval date, and approved Offsets applied during the monitoring period, including the source of Offsets and DEP approval date. The completed forms shall be attached to the DMR submission.

4. The DMR for the reporting of Annual Net Mass Loads for TN and TP is due on November 28th following each Compliance Year. Also due on November 28th is the Annual Nutrient Summary supplemental form (3800-FM-BPNPSM0447), which must be attached to the DMR. This form shall be used to calculate the Annual Net Mass Load and summarize the Credits applied or sold and approved Offsets applied throughout the entire Compliance Year and Truing Period. If Credits are applied or sold or if approved Offsets are applied during the Truing Period, the Monthly Nitrogen Budget and/or Monthly Phosphorus Budget supplemental forms shall also be attached to the DMR to record details of these transactions.

II. QUANTITATION LIMITS

A. For all outfalls, the permittee shall achieve analytical quantitation limits (QLs), as defined in 25 Pa. Code § 252.1, that are at or below the most stringent effluent concentration limitation for each parameter identified in Part A of this permit, as applicable.

B. Where effluent limitations are not applicable and the requirement is to monitor only for parameters in Part A of this permit, the permittee shall achieve QLs less than or equal to the following, for all outfalls:

Parameter	QL (mg/l)	Parameter	QL (mg/l)
Bromide	0.2	Total Dissolved Solids	2.0
Chloride	0.5	Total Iron	0.02
Sulfate	1.0	Total Lead	0.001
Total Aluminum	0.01	Total Manganese	0.002
Total Antimony	0.002	Total Mercury	0.0002
Total Arsenic	0.003	Total Molybdenum	0.004
Total Boron	0.2	Total Nickel	0.004
Total Cadmium	0.0002	Total Selenium	0.007
Total Chromium	0.004	Total Zinc	0.005
Total Copper	0.004		

III. CHEMICAL ADDITIVES

A. Approved Chemical Additives List

1. The permittee is authorized to use chemical additives that are published on DEP's Approved Chemical Additives List (Approved List) (see www.depweb.state.pa.us/chemicaladditives) subject to paragraphs A.2 and A.3, below.

2. The permittee may not discharge a chemical additive at a concentration that is greater than the water quality-based effluent limitation (WQBEL) for the chemical additive or, if applicable, a technology-based effluent limitation. If effluent limitations are not specified in Part A of this permit for the chemical additive, the permittee is responsible for determining the WQBEL and ensuring the WQBEL is not exceeded by restricting usage to an amount that will not cause an excursion above in-stream water quality standards.

3. If the permittee decides to use a chemical additive that is on DEP's Approved List and the use would either (1) constitute an increase in the usage rate specified in the NPDES permit application or previous notification to DEP or (2) constitute a new use, not identified in the NPDES permit application or otherwise no previous notification occurred, the permittee shall complete and submit the "Chemical Additives Notification Form" to the DEP regional office that issued the permit. The permittee may proceed to use the chemical additive as reported on the Form upon receipt by the DEP regional office.

B. New Chemical Additives, Not on Approved Chemical Additives List

1. In the event the permittee wishes to use a chemical additive that is not listed on DEP's Approved List, the permittee shall submit the "New Chemical Additives Request Form" (3800-FM-BPNPSM0486) to DEP's Central Office, Bureau of Point and Non-Point Source Management (BPNPSM), Division of Water Quality Standards, Rachel Carson State Office Building, PO Box 8774, Harrisburg, PA 17105-8774, prior to use. A copy shall be submitted to the DEP regional office that issued the permit. The form must be completed in whole in order for BPNPSM to approve the chemical additive, and a Material Safety Data Sheet (MSDS) that meets the minimum requirements of 29 CFR 1910.1200(g) must be attached.

2. Following placement of the chemical additive on the Approved List, the permittee may submit the "Chemical Additive Notification Form" (3800-FM-BPNPSM0487) in accordance with paragraph A.3, above, to notify DEP of the intent to use the approved chemical additive. The permittee may proceed with usage when the new chemical has been identified on DEP's Approved List and following DEP's receipt of the Chemical Additives Notification Form.

3. The permittee shall restrict usage of chemical additives to the maximum usage rates determined and reported to DEP on Chemical Additives Notification Forms.

C. Chemical Additives Usage Reporting Requirements

The "Chemical Additives Usage Form" (3800-FM-BPNPSM0439) shall be used to report the usage of chemical additives and shall be submitted as an attachment to the Discharge Monitoring Report (DMR) at the time the DMR is submitted.

D. DEP may amend this permit to include WQBELs or otherwise control usage rates of chemical additives if there is evidence that usage is adversely affecting receiving waters, producing Whole Effluent Toxicity test failures, or is causing excursions of in-stream water quality standards.

IV. COOLING WATER INTAKE STRUCTURES

DEP will determine the site-specific Best Technology Available (BTA) for minimizing adverse environmental impacts associated with the use of cooling water intake structures under Section 316(b) of the Clean Water Act following its review of the information required in paragraphs A and B, below.

A. An Entrainment Characterization Study work plan shall be submitted to DEP within 90 days following the permit effective date. The permittee shall respond to DEP's comments on the work plan within 30 days of receipt. Implementation of the plan shall commence at the start of the first fish spawning season following work plan approval by DEP. A final Entrainment Characterization Study shall be submitted to DEP within 24 months following the permit effective date.

The work plan and Study shall include the following, at a minimum:

1. Entrainment data collection shall occur for a period of at least one fish spawning season, approximately March through September, at a sampling frequency sufficient to characterize the occurrence of entrainment.

2. Voucher specimens of two (or one if only one if available) of any federal and/or state threatened, endangered and candidate species collected shall be retained and catalogued. DEP along with the appropriate state and federal authorities shall be notified within 24 hours if any federal and/or state threatened, endangered, or candidate fish species are identified.

3. Entrainment data collection shall be performed by qualified consultants and/or trained professionals with the skills and knowledge appropriate for producing valid samples and evaluations under a formal QA/QC plan.

B. The permittee shall conduct an intake technology analysis that evaluates the following technologies, at a minimum:

1. Modified Ristroph screens with a fish return and continuous screen rotation.

2. Coarse mesh wedgewire screens that maintain an intake velocity of 0.5 fps or less.

3. Fine (2 mm) mesh wedgewire screens that maintain an intake velocity of 0.5 fps or less.

4. Reduction of intake flow using technology or operational changes such as, but not limited to, scheduled shutdowns, reduction of flow during biologically productive time periods, and closed-cycle recirculating cooling.

The analysis shall be submitted to DEP within 24 months of the permit effective date. For each technology listed, the permittee shall evaluate, at a minimum: the likely or potential reduction in fish impingement and entrainment; technical feasibility of technology and/or operational measures; engineering aspects for installation of each technology; estimated timeline for installation of technology; estimated or approximate cost of intake technology, installation, operation and maintenance costs; non-water quality and other environmental impacts or benefits attributable to the technology; likely or potential impacts or operational changes to the steam electric process, if any; and the impact of the existing debris wall on each

technology, if any. Selection of technology and/or operational measures may require additional studies (i.e., a latent mortality study) to determine compliance.

C. DEP will determine BTA based on the criteria specified in EPA's final rule promulgated under Section 316(b) or, in the absence of a final rule, on best professional judgment, and notify the permittee of its decision.

D. The permittee may appeal any determination by DEP, including any determination as to what constitutes BTA, and any action taken by DEP to modify this permit.

V. BIOLOGICAL MONITORING STUDIES

DEP has approved continuation of the existing variance to meet state water quality standards under Section 316(a) of the Clean Water Act. The permittee shall continue to perform biological monitoring studies for a minimum of three (3) summer seasons (August) and three (3) winter seasons (December 15 – February 28). The studies shall be completed in accordance with the Biological Monitoring Study Plan approved on June 4, 2008. DEP will review all biological data to determine whether the current variance is protective of the waterbody's balanced indigenous population. If DEP determines the current variance is not protective of the waterbody's balanced indigenous population, the permittee will be required to submit a plan documenting technological or operational adjustments, as well as an implementation schedule for each technology or operational adjustment, that are protective of the balanced indigenous population.

VI. REQUIREMENTS APPLICABLE TO STORMWATER OUTFALLS

A. The permittee is authorized to discharge non-polluting stormwater from its site, alone or in combination with other wastewaters, through the following outfalls:

Outfall	Latitude	Longitude	Receiving Stream
006	40°05'15"	76°41'43"	Susquehanna River
008	40°05'46"	76°41'32"	Drainage swale to Susquehanna River
009	40°05'40"	76°42'08"	Wetlands to Conewago Creek
010	40°05'09"	76°41'04"	Susquehanna River
011	40°05'19"	76°41'37"	Hartman Run
012	40°06'01"	76°41'55"	Combined with Outfall 013
013	40°05'49"	76°41'32"	Susquehanna River
014	40°05'51"	76°41'34"	Combined with Outfall 013
015	40°05'31"	76°41'21"	Susquehanna River
016	40°05'17"	76°41'40"	Hartman Run
017	40°05'06"	76°41'33"	Hartman Run
018	40°05'09"	76°41'26"	Hartman Run
019	40°05'02"	76°41'22"	Hartman Run
020	40°04'57"	76°41'17"	Combined with Outfall 021
021	40°04'53"	76°41'17"	Hartman Run
022	40°04'49"	76°41'12"	Hartman Run
023	40°04'40"	76°40'56"	Hartman Run
024	40°04'34"	76°40'44"	Hartman Run
025	40°04'54"	76°40'50"	Susquehanna River
026	40°05'53"	76°42'07"	Conewago Creek
027	40°05'32"	76°41'23"	Susquehanna River (Combined with Outfall 007)
028	40°05'36.5"	76°41'30.2"	Susquehanna River
029	40°05'34.7"	76°41'27"	Susquehanna River
030	40°4'37"	76°40'40"	Susquehanna River (upon closure of Ash Basin No. 6)

B. Monitoring requirements for Outfalls 006, 013, 014, 015, and 026 are specified in Part A of this permit. All stormwater outfalls shall be marked in the field for identification purposes within 90 days of permit issuance.

C. Preparedness, Prevention and Contingency (PPC) Plan

The permittee must develop and implement a PPC Plan in accordance with 25 Pa. Code § 91.34 following the guidance contained in DEP's "Guidelines for the Development and Implementation of Environmental Emergency Response Plans" (DEP ID 400-2200-001), its NPDES-specific addendum and the minimum requirements below. For existing facilities, the PPC Plan must be developed prior to permit issuance. For new facilities, the PPC Plan must be submitted to DEP no later than prior to startup of facility operation.

1. The PPC Plan must identify all potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the facility.

2. The PPC Plan must describe preventative measures and best management practices (BMPs) that will be implemented to reduce or eliminate pollutants from coming into contact with stormwater resulting from routine site activities and spills.

3. The PPC Plan must address actions that will be taken in response to on-site spills or other pollution incidents.

4. The PPC Plan must identify areas which, due to topography or other factors, have a high potential for soil erosion, and identify measures to limit erosion. Where necessary, erosion and sediment control measures must be developed and implemented in accordance with 25 Pa. Code Chapter 102 and DEP's "Erosion and Sediment Pollution Control Manual" (DEP ID 363-2134-008).

5. The PPC Plan must address security measures to prevent accidental or intentional entry which could result in an unintentional discharge of pollutants.

6. The PPC Plan must include a plan for training employees and contractors on pollution prevention, BMPs, and emergency response measures.

7. If the facility is subject to SARA Title III, Section 313, the PPC Plan must identify releases of "Water Priority Chemicals" within the previous three years. Water Priority Chemicals are those identified in EPA's "Guidance for the Determination of Appropriate Methods for the Detection of Section 313 Water Priority Chemicals" (EPA 833-B-94-001, April 1994). The Plan must include an evaluation of all activities that may result in the stormwater discharge of Water Priority Chemicals.

Spill Prevention Control and Countermeasure (SPCC) plans may be used to meet the requirements of this section if the minimum requirements are addressed.

The PPC Plan shall be evaluated and if necessary updated on an annual basis, at a minimum, and when one or more of the following occur:

- Applicable DEP or federal regulations are revised, or this permit is revised;
- The Plan fails in an emergency;
- There is a change in design, industrial process, operation, maintenance, or other circumstances, in a manner that materially increases the potential for fires, explosions or releases of toxic or hazardous constituents; or which changes the response necessary in an emergency;
- The list of emergency coordinators or equipment changes; or
- When notified in writing by DEP.

All updates must be kept on-site and be made available to DEP upon request.

D. Minimum Required BMPs

In addition to BMPs identified in the PPC Plan, the permittee shall implement the following minimum BMPs relating to stormwater pollution prevention:

1. If applicable, post-construction stormwater BMPs that are required under 25 Pa. Code Chapter 102 must be maintained.

2. For industrial facilities, the BMPs in the applicable Appendix to the NPDES PAG-03 General Permit for Discharges of Stormwater Associated with Industrial Activities that is currently in effect.

E. Annual Inspection and Compliance Evaluation

On an annual basis, the permittee shall conduct an annual inspection of each outfall identified in paragraph A and record the results on the "Annual Inspection Form for NPDES Permits for Discharges of Stormwater Associated with Industrial Activities" (3800-PM-WSFR0083v). The form shall be retained on-site and be made available to DEP upon request.

Areas contributing to a stormwater discharge associated with industrial activity shall be visually inspected for evidence of, or the potential for, pollutants entering the drainage system. BMPs in the PPC Plan and required by this permit shall be evaluated to determine whether they are adequate and properly implemented in accordance with the terms of this permit or whether additional control measures are needed.

F. Stormwater Sampling Requirements

If stormwater sampling is required in Part A of this permit, the following requirements apply:

1. The permittee shall record stormwater sampling event information on the "Additional Information for the Reporting of Stormwater Discharge Monitoring" form (3800-PM-WSFR0083t) and submit the form as an attachment to the DMR.

2. All samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch in magnitude and that occurs at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. The 72-hour storm interval is waived when the preceding storm did not yield a measurable discharge, or if the permittee is able to document that a less than 72-hour interval is representative for local storm events during the sample period.

3. Grab samples shall be taken during the first 30 minutes of the discharge. If the collection of a grab sample during the first 30 minutes is not possible, a grab sample can be taken during the first hour of the discharge, in which case the discharger shall provide an explanation of why a grab sample during the first 30 minutes was not possible.

VII. OTHER REQUIREMENTS

A. The approval herein given is specifically made contingent upon the permittee acquiring all necessary property rights by easement or otherwise, providing for the satisfactory construction, operation, maintenance or replacement of all structures associated with the herein approved discharge in, along, or across private property, with full rights of ingress, egress and regress.

B. Collected screenings, slurries, sludges, and other solids shall be handled, recycled and/or disposed of in compliance with the Solid Waste Management Act (35 P.S. §§ 6018.101 – 6018.1003), 25 Pa. Code Chapters 287, 288, 289, 291, 295, 297, and 299 (relating to requirements for landfilling, impoundments, land application, composting, processing, and storage of residual waste), Chapters 261a, 262a, 263a, and 270a (related to identification of hazardous waste, requirements for generators and transporters, and hazardous waste, requirements for generators and transporters, and hazardous waste permit programs), federal regulation 40 CFR Part 257, The Clean Streams Law, and the Federal Clean Water Act and its

amendments. Screenings collected at intake structures shall be collected and managed and not be returned to the receiving waters.

The permittee is responsible to obtain or assure that contracted agents have all necessary permits and approvals for the handling, storage, transport and disposal of solid waste materials generated as a result of wastewater treatment.

C. The terms and conditions of Water Quality Management (WQM) permits that may have been issued to the permittee relating to discharge requirements are superseded by this NPDES permit unless otherwise stated herein.

D. If applicable standards or effluent guideline limitations (ELGs) relating to the application of Best Available Technology Economically Achievable (BAT) or Best Conventional Technology (BCT) is developed by DEP or EPA for this type of industry, and if such standard or limitation is more stringent than the corresponding limitations of this permit (or if it controls pollutants not covered by this permit), DEP may modify or revoke and reissue the permit to conform with that standard or limitation.

E. The permittee shall optimize chlorine dosages used for disinfection or other purposes to minimize the concentration of Total Residual Chlorine (TRC) in the effluent, meet applicable effluent limitations, and reduce the possibility of adversely affecting the receiving waters. Optimization efforts may include an evaluation of wastewater characteristics, mixing characteristics, and contact times, adjustments to process controls, and maintenance of the disinfection facilities. If DEP determines that effluent TRC is causing adverse water quality impacts, DEP may reopen this permit to apply new or more stringent effluent limitations and/or require implementation of control measures or operational practices to eliminate such impacts.

Where the permittee does not use chlorine for primary or backup disinfection, but proposes the use of chlorine for cleaning or other purposes, the permittee shall notify DEP prior to initiating use of chlorine and monitor TRC concentrations in the effluent on each day in which chlorine is used. The results shall be submitted as an attachment to the DMR.

F. The temperature limitations in this permit represent DEP's approval of the thermal variance request submitted by the permittee in accordance with Section 316(a) of the Federal Clean Water Act. The application for renewal of this variance must be submitted with the permit renewal application at least 180 days prior to the expiration date of this permit. If the variance renewal request is complete, the variance will be automatically continued and will remain fully effective and enforceable pending the approval or denial of the variance request. The variance renewal application may require collection of seasonal stream data; therefore, the permittee should contact DEP at least eighteen (18) months in advance of permit expiration to determine what data are required for renewal of the variance.

G. There shall be no net addition of pollutants to non-contact cooling water over intake values except for temperature and chemical additives for which complete information was submitted in the application or is required to be submitted as a condition of this permit.

H. There shall be no discharge of polychlorinated biphenyl (PCB) compounds such as those commonly used for transformer fluid at any time.

I. Boiler cleaning solutions and the first water rinse shall be properly disposed of off-site. Subsequent water rinses may be discharged to the IWTB (Outfall 002) or the Industrial Wastewater Treatment Plant (Outfall 005). When such rinses are discharged to on-site facilities, the permittee shall comply with the effluent limitations and monitoring requirements specified for IMP 501 in Part A I.F of this permit.